

### **REMARKS**

Claims 12-14, 16-22, 28, 29 and 39-42 are pending in the application. Claims 40-42 have been withdrawn from consideration. Claims 12 and 39 have been amended. Support for the amendment can be found in, e.g., paragraph [0042] on page 25 or example 2 on page 28 of the instant specification. In addition, it can be well understood that various ingredients, such as potassium, sodium, magnesium, calcium, supplemented to the wheat preparation disclosed in the above identified part of the specification can generally be said as “supplemental minerals”, which the applicant believe does not add new matter.

**Claims 12-14, 16-22, 28-29, and 39 are newly rejected under 35 U.S.C. 103(a) as being unpatentable over Rosell et al (Rosell et al, Experimental approach to optimize the use of alpha-amylases in bread making, Journal of agricultural and food chemistry 2001, 49 (6): 2973-2977), in view of Inagawa et al (Homeostasis as regulated by activated macrophage. II. LPS of plant origin other than wheat flour and their concomitant bacteria, Chem. Pharm. Bull. 40 (4) 994-997, 1992).** (Office Action, page 2)

The essence of the present invention lies in the fact that the instant inventors “have found for the first time that *Pantoea agglomerans* can grow directly using starch as a carbon source” (lines 3-1 from the bottom on page 20 of the specification), and the resulting plant extracts “has the immunopotential effect qualitatively different” from those of the components of the plant itself and the bacteria itself. (lines 6-10 on page 20 of the specification). The amended claims clarify that the *P.agglomerans* is cultured in the medium in which the wheat flour is fermented. In other words, the fermentation and the culturing are done simultaneously in the same wheat preparation. As is clear from the claims, adding an exogenous amylases is not a necessary step to obtain a product of interest.

In addition, the fact that the instant inventors “have found for the first time that *Pantoea agglomerans* can grow directly using starch as a carbon source” (lines 301 from the bottom on page 20 of the specification) is supported by the attached extrinsic evidence, Gavini, et al., “Transfer of *Enterobacter agglomerance* (Bijerinck 1888) Ewing and Fife 1972 to *Pantoea* gen. nov. as *Pantoea agglomerans* comb. Nov and Description of *Pantoea dispersa* sp. nov”, International Journal of Systematic Bacteriology, July 1989, p. 337-345. Specifically, Gavini et al stated that *Pantoea agglomerans* does not use starch as carbon source on pages 343-344.

Gavini et al. supports the statement in the specification, “[c]onversely, on the basis of publicly known facts, it has been described that *Pantoea agglomerans* cannot utilize wheat starch as the fermentation substrate”, lines 7-4 from the bottom on page 8 of the instant specification.

Rosell merely discussed alpha-amylase behavior. As is clear from the present claims, amylase is not necessary to obtain the product of interest, i.e., plant extracts having the immunopotential effect qualitatively different from those of the components of the plant itself and the bacteria itself. In addition, Inagawa merely surveyed LPS of plant origin other than that of wheat flour. There is no motivation to combine Rosell and Inagawa. Just because *P. agglomerans* lives in a symbiotic relationship exclusively with the plant, that does not suggest that it automatically produce the claimed extract and that is backed up by Gavini, et al. Neither Rosell nor Inagawa shows that the plant extract of the present invention can be obtained by fermenting and culturing the wheat flour preparation containing *P. agglomerans*.

Accordingly, it is respectfully requested that the rejection be reconsidered and withdrawn. In view of the above amendment, applicant believes the pending application is in condition for allowance.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 04-1105.

Respectfully submitted,

Dated: July 21, 2011

Customer No. 21874

Electronic signature: /James E. Armstrong, IV/  
James E. Armstrong, IV  
Registration No.: 42,266  
EDWARDS ANGELL PALMER & DODGE  
LLP  
P.O. Box 55874  
Boston, Massachusetts 02205  
(202) 478-7375  
Attorneys/Agents For Applicant

Encls: Gavini, et al., “Transfer of *Enterobacter agglomerans* (Bijerinck 1888) Ewing and Fife 1972 to *Pantoea* gen. nov. as *Pantoea agglomerans* comb. Nov and Description of *Pantoea dispersa* sp. nov”, International Journal of Systematic Bacteriology, July 1989, p. 337-345.